



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Perfluorocarbon (PFC) Analysis

Lot #: D9I040249

Dena Haverland

Dalton Utilities
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September 28, 2009

Case Narrative D9I040249

TestAmerica Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the methods summary page in accordance with the methods indicated. Dilution factors and footnotes are provided on each datasheet to assist in the interpretation of the results.

The results relate only to the samples in this report and meet all requirements of NELAC. All data have been reviewed for compliance with the laboratory QA/QC plan and have found to be compliant with laboratory protocols with any exceptions noted below.

Please note that Non-Detect (ND) results have been evaluated down to the Method Detection Limit (MDL) and should be considered ND at the MDL. Unless otherwise noted, results for solids have been dry weight corrected.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Sample Arrival and Receipt

The following report contains the analytical results for eleven samples received at TestAmerica Denver on September 4, 2009, according to documented sample acceptance procedures. The samples were received in good condition at a temperature of 2.6°C.

Samples I-2 STP2 INF, I-3 STP3 INF and I-4 STP4 INF were initially logged in this lot, as all samples were listed on a single chain of custody. Per client instruction on September 8, 2009, these samples were deleted from D9I040249 and moved to a separate lot. A revised chain of custody was received on September 10, 2009. Both the original and revised chains of custody are included in the report.

No other anomalies were encountered during sample receipt.

Standards

Analytical standards were prepared using commercially available certified solutions containing all compounds of interest.

The mass labeled compounds 13C4 PFBA, 13C2 PFHxA, 18O2 PFHxS, 13C4 PFOA, 13C4 PFOS, 13C5 PFNA, 13C2 PFDA, 13C2 PFUnA, 13C2 PFDoA, and D3 MeFOSA were introduced at the extraction step and were used for internal standards for the quantitation of the target compounds.

Sample Extraction and Analysis

The samples presented in this report were extracted for the target analytes by TestAmerica Denver's Standard Operating Procedure (SOP) DV-OP-0019 and analyzed for the target analytes by TestAmerica Denver's SOP DV-LC-0012.

Method QC Samples

The Method Blank is processed reagent water spiked with surrogate and prepared with each batch of 20 samples of the same matrix. The method blanks were non-detect at the reporting limits for the target analytes.

Each batch is prepared with low and mid level Laboratory Control Samples (LCS). The LCS recoveries for both levels were within established control limits, with the exception of the items noted in section Analytical Comments.

Analytical Comments

The Standard Operating Procedure (SOP) was altered slightly in the sample preparation for FOSA. Sodium hydroxide was added to the sample to obtain a pH of 14 instead of the SOP required <2. The basic pH is generating better internal standard recoveries for Me FOSA.

The Standard Operating Procedure (SOP) was altered slightly in the FOSA sample preparation of samples #68 10368 HWY 225, #69 7357 HWY 225, #71 252 CENTER HILL CHURCH RD, #72 346 CENTER HILL CHURCH RD, #73 1121 CENTER HILL CHURCH RD, #74 1143 CENTER HILL CHURCH RD, DUP and DUP#2 in batch 9259175. Strata-XL cartridges were used instead of the SOP required Strata-X. The Strata-XL cartridge was used to minimize clogging during the extraction of these samples, as the larger pore size of the Strata-XL allows more viscous sample matrix to be extracted.

Please note during the FOSA extraction process samples #71 252 CENTER HILL CHURCH RD, #72 346 CENTER HILL CHURCH RD, #68 10368 HWY 225, #69 7357 HWY 225 and DUP clogged the cartridge; therefore, the organic preparation chemist used a second cartridge for each of these samples.

The internal standard recovery for 13C2 PFDoA associated with QC batch 9252175 was recovered below 50% in sample DUP. Upon re-extraction and reanalysis in QC batch 9257502, internal standard recoveries were 100% in control. Both the original and reanalysis data have been provided, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

Due to low internal standard recoveries in the method blank, the mid-level LCS and the samples associated with QC batch 9253507, all associated samples were re-extracted outside of the laboratory prescribed holding time and reanalyzed in QC batch 9258499. Both batches are included in this report. Please note the sample results should be considered estimated.

The internal standard recovery for 13C2 PFDoA and/or 13C2 PFUnA associated with QC batch 9253507 were recovered below the lower limit of 50% in four of the samples as detailed below. Upon re-extraction and reanalysis in QC batch 9258499, internal standard recoveries were 100% in control for these four samples. However, two samples with acceptable internal standard recoveries in batch 9253507 exhibited recoveries below the control limits in QC batch 9258499, as detailed below:

Sample	Original Internal Standard Recovery (9253507)	Re-analysis Internal Standard Recovery (9258499)
#70 300 NGA RACEWAY RD	13C2 PFDoA: 49%	13C2 PFDoA: 61%
#71 252 CENTER HILL CHURCH RD	13C2 PFUnA: 48% 13C2 PFDoA: 47%	13C2 PFUnA: 55% 13C2 PFDoA: 54%
#72 346 CENTER HILL CHURCH RD	13C2 PFUnA: 49% 13C2 PFDoA: 47%	13C2 PFUnA: 72% 13C2 PFDoA: 66%
#73 1121 CENTER HILL CHURCH RD	13C2 PFUnA: 47% 13C2 PFDoA: 49%	13C2 PFUnA: 69% 13C2 PFDoA: 56%
#74 1143 CENTER HILL CHURCH RD	13C2 PFDoA: 62%	13C2 PFDoA: 49%
DUP#2	13C2 PFDoA: 68%	13C2 PFDoA: 49%

Both the original and re-analysis data are reported, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

The internal standard recovery for MeFOSA associated with QC batch 9252176 was recovered below 50% in sample DUP. Upon re-extraction and reanalysis in QC batch 9257502, internal standard recoveries were 100% in control. Both the original and reanalysis data have been provided, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

The internal standard recovery for MeFOSA associated with QC batches 9253504 and 9252176 was recovered below the lower control limit of 50% in the samples listed below. Upon re-extraction and reanalysis outside of hold, in QC batch 9259175, internal standard recovery outliers were still present in some samples, while other samples exhibited recoveries within control, as detailed below:

Sample	MeFOSA Recovery Original (9253504*)	MeFOSA Recovery Re-analysis (9259175)
#68 10368 HWY 225	43.6% (9252176)	55%
#69 7357 HWY 225	28.4% (9252176)	52%
#71 252 CENTER HILL CHURCH RD	45.2%	48%
#72 346 CENTER HILL CHURCH RD	35.7%	46%
#73 1121 CENTER HILL CHURCH RD	33.5%	37%
#74 1143 CENTER HILL CHURCH RD	47%	51%
DUP#2	39%	53%

* Batch 9253504 unless otherwise noted.

Only the original data has been reported for samples demonstrating internal standard recoveries outside QC limits in both the original and re-analysis data, as this indicates that the anomaly is most likely due to matrix interference. Both the original and re-analysis data are reported for the samples demonstrating internal standard recoveries 100% in control in the re-analysis batch, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

The Method Blank associated with QC batch 9253507 exhibited an internal standard recovery outside the QC control limits for 13C2 PFDoA. Upon re-extraction and reanalysis in QC batch 9258499, internal standard recoveries were 100% in control. Both sets of data have been provided, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

Due to a limitation in the LIMS system, the low-level LCS associated with QC batches 9258499 and 9257502 reported the percent recoveries for Perfluorotridecanoic Acid (PFTriA) as 0.0%. PFTriA was recovered within the control limits (50-150%) in both QC batches, however as the compound was detected below the Method Detection Limit (MDL) of 0.020 ug/L, the system reports the percent recoveries as 0.0%.

The mid-level LCS analyses associated with QC batch 9253507 internal standard recoveries outside the QC control limits for 13C2 PFUnA and 13C2 PFDoA. Upon re-extraction and reanalysis in QC batch 9258499, internal standard recoveries were 100% in control. Both sets of data have been provided, as re-extraction was unavoidably performed outside the laboratory recommended sample holding time.

Lot #: D9I040249

The method required MS/MSD could not be performed for QC batches 9252175, 9253507, 9258499, 9257502, 9252176, 9259175, and 9253504, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable low-level LCS and mid-level LCS/LCSD analyses data.

No other anomalies were observed.

EXECUTIVE SUMMARY - Detection Highlights

D9I040249

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
#69 7357 HWY 225 09/02/09 14:23 006				
Perfluoroundecanoic acid (PFUn	0.0029 J	0.020	ug/L	DEN -LC-0012

METHODS SUMMARY

D9I040249

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
LC/MS/MS PFCs	DEN -LC-0012	SW846 FOSA spec

References:

DEN Severn Trent Laboratores, Denver, Facility Standard
Operating Procedure.

METHOD / ANALYST SUMMARY

D9I040249

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
DEN -LC-0012	Jacqueline Bonnett	003601

References:

DEN Severn Trent Laboratores, Denver, Facility Standard
Operating Procedure.

SAMPLE SUMMARY

D9I040249

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LKDJP	004	#67 737 KIRBY YOUNG RD	09/02/09	10:20
LKDJR	005	#68 10368 HWY 225	09/02/09	13:26
LKDJT	006	#69 7357 HWY 225	09/02/09	14:23
LKD JW	007	#70 300 NGA RACEWAY RD	09/03/09	14:18
LKDJO	008	#71 252 CENTER HILL CHURCH RD	09/03/09	14:44
LKD J2	009	#72 346 CENTER HILL CHURCH RD	09/03/09	15:05
LKD J3	010	#73 1121 CENTER HILL CHURCH RD	09/03/09	15:49
LKD J5	011	#74 1143 CENTER HILL CHURCH RD	09/03/09	16:00
LKD J9	012	#75 167 ZEKE ALLEN RD	09/03/09	16:31
LKD KA	013	DUP	09/02/09	
LKD KD	014	DUP#2	09/03/09	
LKD KH	015	TRIP BLK	09/03/09	
LKD KK	016	FIELD BLK	09/03/09	

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Dalton Utilities

Client Sample ID: #67 737 KIRBY YOUNG RD

HPLC

Lot-Sample #....: D9I040249-004 Work Order #....: LKDJP1AA Matrix.....: WATER
 Date Sampled....: 09/02/09 10:20 Date Received...: 09/04/09
 Prep Date.....: 09/09/09 Analysis Date...: 09/09/09
 Prep Batch #....: 9252175 Analysis Time...: 21:08
 Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0084

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C4 PFOA	97	(50 - 200)
13C4 PFOS	69	(50 - 200)
13C4 PFBA	87	(50 - 200)
13C2 PFHxA	104	(50 - 200)
18O2 PFHxS	88	(50 - 200)
13C5 PFNA	78	(50 - 200)
13C2 PFDA	66	(50 - 200)
13C2 PFUnA	68	(50 - 200)
13C2 PFDoA	69	(50 - 200)

Dalton Utilities

Client Sample ID: #67 737 KIRBY YOUNG RD

HPLC

Lot-Sample #....: D9I040249-004 Work Order #....: LKDJP1AC Matrix.....: WATER
Date Sampled....: 09/02/09 10:20 Date Received...: 09/04/09
Prep Date.....: 09/09/09 Analysis Date...: 09/10/09
Prep Batch #....: 9252176 Analysis Time...: 02:24
Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluoroctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
MePOSA	54	(50 - 200)		

Dalton Utilities

Client Sample ID: #68 10368 HWY 225

HPLC

Lot-Sample #....: D9I040249-005 Work Order #....: LKDJR1AA Matrix.....: WATER
 Date Sampled....: 09/02/09 13:26 Date Received...: 09/04/09
 Prep Date.....: 09/09/09 Analysis Date...: 09/09/09
 Prep Batch #....: 9252175 Analysis Time...: 21:24
 Dilution Factor: 1 Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0055
Perfluoroctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFHxS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C4 PFOA	95	(50	- 200)
13C4 PFOS	61	(50	- 200)
13C4 PFBA	87	(50	- 200)
13C2 PFHxA	96	(50	- 200)
18O2 PFHxS	89	(50	- 200)
13C5 PFNA	73	(50	- 200)
13C2 PFDA	56	(50	- 200)
13C2 PFUnA	54	(50	- 200)
13C2 PFDoA	51	(50	- 200)

Dalton Utilities

Client Sample ID: #68 10368 HWY 225

HPLC

Lot-Sample #....: D9I040249-005 Work Order #....: LKDJR1AC Matrix.....: WATER
Date Sampled....: 09/02/09 13:26 Date Received...: 09/04/09
Prep Date.....: 09/09/09 Analysis Date...: 09/10/09
Prep Batch #....: 9252176 Analysis Time...: 02:32
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
MeFOSA	44 *	(50 - 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #68 10368 HWY 225

HPLC

Lot-Sample #....: D9I040249-005 Work Order #....: LKDJR2AC Matrix.....: WATER
Date Sampled....: 09/02/09 13:26 Date Received...: 09/04/09
Prep Date.....: 09/16/09 Analysis Date...: 09/19/09
Prep Batch #....: 9259175 Analysis Time...: 18:08
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
MeFOSA	55	(50 - 200)		

Dalton Utilities

Client Sample ID: #69 7357 HWY 225

HPLC

Lot-Sample #....: D9I040249-006 Work Order #....: LKDJT1AA Matrix.....: WATER
 Date Sampled....: 09/02/09 14:23 Date Received...: 09/04/09
 Prep Date.....: 09/09/09 Analysis Date...: 09/09/09
 Prep Batch #....: 9252175 Analysis Time...: 21:40
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	0.0029 J	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	99	(50 - 200)
13C4 PFOS	63	(50 - 200)
13C4 PFBA	89	(50 - 200)
13C2 PFHxA	93	(50 - 200)
18O2 PFHxS	94	(50 - 200)
13C5 PFNA	76	(50 - 200)
13C2 PFDA	59	(50 - 200)
13C2 PFUnA	63	(50 - 200)
13C2 PFDoA	57	(50 - 200)

NOTE(S) :

J Estimated result. Result is less than RL.

Dalton Utilities

Client Sample ID: #69 7357 HWY 225

HPLC

Lot-Sample #....: D9I040249-006 Work Order #....: LKDJT1AC Matrix.....: WATER
Date Sampled...: 09/02/09 14:23 Date Received...: 09/04/09
Prep Date.....: 09/09/09 Analysis Date...: 09/10/09
Prep Batch #....: 9252176 Analysis Time...: 02:39
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluoroctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT RECOVERY	RECOVERY	LIMITS	
MeFOSA	28 *	(50 - 200)		

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #69 7357 HWY 225

HPLC

Lot-Sample #: D9I040249-006 Work Order #: LKDJT2AC Matrix.....: WATER
Date Sampled...: 09/02/09 14:23 Date Received...: 09/04/09
Prep Date.....: 09/16/09 Analysis Date...: 09/19/09
Prep Batch #: 9259175 Analysis Time...: 18:16
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
MeFOSA	52	(50 - 200)		

Dalton Utilities

Client Sample ID: #70 300 NGA RACEWAY RD

HPLC

Lot-Sample #....: D9I040249-007 Work Order #....: LKD JW1AA Matrix.....: WATER
 Date Sampled....: 09/03/09 14:18 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 20:37
 Dilution Factor: 1 Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.0072
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0055
Perfluoroctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0025
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFHS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C4 PFOA	126	(50	- 200)
13C4 PFOS	65	(50	- 200)
13C4 PFBA	90	(50	- 200)
13C2 PFHxA	109	(50	- 200)
18O2 PFHxS	102	(50	- 200)
13C5 PFNA	84	(50	- 200)
13C2 PFDA	59	(50	- 200)
13C2 PFUnA	50	(50	- 200)
13C2 PFDoA	49 *	(50	- 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #70 300 NGA RACEWAY RD

HPLC

Lot-Sample #....: D9I040249-007 Work Order #....: LKD JW1AC Matrix.....: WATER
Date Sampled...: 09/03/09 14:18 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 15:33
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
MeFOSA	54	(50 - 200)

Dalton Utilities

Client Sample ID: #70 300 NGA RACEWAY RD

HPLC

Lot-Sample #....: D9I040249-007 Work Order #....: LKD JW2AA Matrix.....: WATER
 Date Sampled....: 09/03/09 14:18 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 10:43
 Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.018
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0098
Perfluoroctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0069
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBs)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFHxs)	ND	0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
13C4 PFOA	114	(50 - 200)
13C4 PFOS	66	(50 - 200)
13C4 PFBA	88	(50 - 200)
13C2 PFHxA	94	(50 - 200)
18O2 PFHxs	99	(50 - 200)
13C5 PFNA	78	(50 - 200)
13C2 PFDA	70	(50 - 200)
13C2 PFUnA	62	(50 - 200)
13C2 PFDoA	61	(50 - 200)

Dalton Utilities

Client Sample ID: #71 252 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-008 Work Order #....: LKDJ01AA Matrix.....: WATER
 Date Sampled...: 09/03/09 14:44 Date Received..: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date..: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 20:53
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0055
Perfluoroctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH XS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	118	(50 - 200)
13C4 PFOS	63	(50 - 200)
13C4 PFBA	88	(50 - 200)
13C2 PFHxA	109	(50 - 200)
18O2 PFHxS	101	(50 - 200)
13C5 PFNA	80	(50 - 200)
13C2 PFDA	53	(50 - 200)
13C2 PFUnA	48 *	(50 - 200)
13C2 PFDoA	47 *	(50 - 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #71 252 CENTER HILL CHURCH RD

HPLC

Lot-Sample #: D9I040249-008 Work Order #: LKDJ01AC Matrix.....: WATER
 Date Sampled...: 09/03/09 14:44 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #: 9253504 Analysis Time...: 15:40
 Dilution Factor: 1
 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
MeFOSA	RECOVERY	<u>LIMITS</u>		
	45 *	(50 - 200)		

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #71 252 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-008 Work Order #....: LKDJ02AA Matrix.....: WATER
 Date Sampled....: 09/03/09 14:44 Date Received..: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date..: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 10:59
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xS)	ND	0.030	ug/L	0.0070

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	104	(50 - 200)
13C4 PFOS	61	(50 - 200)
13C4 PFBA	76	(50 - 200)
13C2 PFHxA	87	(50 - 200)
18O2 PFHxS	83	(50 - 200)
13C5 PFNA	67	(50 - 200)
13C2 PFDA	58	(50 - 200)
13C2 PFUnA	55	(50 - 200)
13C2 PFDoA	54	(50 - 200)

Dalton Utilities

Client Sample ID: #72 346 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-009 Work Order #....: LKDJ21AA Matrix.....: WATER
 Date Sampled....: 09/03/09 15:05 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 21:09
 Dilution Factor: 1
 Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDo	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFT	ND	0.020	ug/L	0.0072
riA)				
Perfluorotetradecanoic acid (P	ND	0.020	ug/L	0.0087
FTeA)				
Perfluorobutane sulfonate (PFB	ND	0.020	ug/L	0.0045
S)				
Perfluorohexane sulfonate (PFH	ND	0.030	ug/L	0.0084
xs)				

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
		(50	- 200)
13C4 PFOA	128		
13C4 PFOS	64		
13C4 PFBA	92		
13C2 PFHxA	112		
18O2 PFHxS	98		
13C5 PFNA	83		
13C2 PFDA	59		
13C2 PFUnA	49 *		
13C2 PFDoA	47 *		

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #72 346 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-009 Work Order #....: LKDJ21AC Matrix.....: WATER
Date Sampled...: 09/03/09 15:05 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 15:47
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
MeFOSA	36 *	(50 - 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #72 346 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-009 Work Order #....: LKDJ22AA Matrix.....: WATER
 Date Sampled....: 09/03/09 15:05 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 15:59
 Dilution Factor: 1 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0069
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.015
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBs)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFHxs)	ND	0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
13C4 PFOA	125	(50 - 200)
13C4 PFOS	69	(50 - 200)
13C4 PFBA	84	(50 - 200)
13C2 PFHxA	95	(50 - 200)
18O2 PFHxS	107	(50 - 200)
13C5 PFNA	79	(50 - 200)
13C2 PFDA	72	(50 - 200)
13C2 PFUnA	72	(50 - 200)
13C2 PFDoA	66	(50 - 200)

Dalton Utilities

Client Sample ID: #73 1121 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-010 Work Order #....: LKDJ31AA Matrix.....: WATER
 Date Sampled...: 09/03/09 15:49 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 21:26
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C4 PFOA	127	(50	- 200)
13C4 PFOS	62	(50	- 200)
13C4 PFBA	93	(50	- 200)
13C2 PFHxA	113	(50	- 200)
18O2 PFHxS	97	(50	- 200)
13C5 PFNA	84	(50	- 200)
13C2 PFDA	54	(50	- 200)
13C2 PFUnA	47 *	(50	- 200)
13C2 PFDoA	49 *	(50	- 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #73 1121 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-010 Work Order #....: LKDJ31AC Matrix.....: WATER
Date Sampled....: 09/03/09 15:49 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 16:02
Dilution Factor: 1 Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
MeFOSA	34 *	(50 - 200)		

NOTE (S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #73 1121 CENTER HILL CHURCH RD

HPLC

Lot-Sample #: D9I040249-010 Work Order #: LKDJ32AA Matrix.....: WATER
 Date Sampled...: 09/03/09 15:49 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #: 9258499 Analysis Time...: 16:15
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xS)	ND	0.030	ug/L	0.0070

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C4 PFOA	114	(50	- 200)
13C4 PFOS	70	(50	- 200)
13C4 PFBA	78	(50	- 200)
13C2 PFHxA	87	(50	- 200)
18O2 PFHxS	99	(50	- 200)
13C5 PFNA	79	(50	- 200)
13C2 PFDA	70	(50	- 200)
13C2 PFUnA	69	(50	- 200)
13C2 PFDoA	56	(50	- 200)

Dalton Utilities

Client Sample ID: #74 1143 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-011 Work Order #....: LKDJ51AA Matrix.....: WATER
 Date Sampled....: 09/03/09 16:00 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 21:58
 Dilution Factor: 1 Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFHxS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	127	(50 - 200)
13C4 PFOS	72	(50 - 200)
13C4 PFBA	98	(50 - 200)
13C2 PFHxA	120	(50 - 200)
18O2 PFHxS	100	(50 - 200)
13C5 PFNA	86	(50 - 200)
13C2 PFDA	71	(50 - 200)
13C2 PFUnA	62	(50 - 200)
13C2 PFDoA	62	(50 - 200)

Dalton Utilities

Client Sample ID: #74 1143 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-011 Work Order #....: LKDJ51AC Matrix.....: WATER
Date Sampled...: 09/03/09 16:00 Date Received..: 09/04/09
Prep Date.....: 09/10/09 Analysis Date..: 09/11/09
Prep Batch #....: 9253504 Analysis Time..: 16:09
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
MeFOSA	47 *	(50 - 200)

NOTE(S):

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #74 1143 CENTER HILL CHURCH RD

HPLC

Lot-Sample #: D9I040249-011 Work Order #: LKDJ52AA Matrix.....: WATER
 Date Sampled...: 09/03/09 16:00 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #: 9258499 Analysis Time...: 16:31
 Dilution Factor: 1
 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
13C4 PFOA	100	(50 - 200)
13C4 PFOS	56	(50 - 200)
13C4 PFBA	70	(50 - 200)
13C2 PFHxA	77	(50 - 200)
18O2 PFHxS	85	(50 - 200)
13C5 PFNA	62	(50 - 200)
13C2 PFDA	63	(50 - 200)
13C2 PFUnA	57	(50 - 200)
13C2 PFDoA	49 *	(50 - 200)

NOTE (S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: #74 1143 CENTER HILL CHURCH RD

HPLC

Lot-Sample #....: D9I040249-011 Work Order #....: LKDJ52AC Matrix.....: WATER
Date Sampled...: 09/03/09 16:00 Date Received..: 09/04/09
Prep Date.....: 09/16/09 Analysis Date..: 09/19/09
Prep Batch #....: 9259175 Analysis Time..: 18:51
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
MeFOSA	51	(50 - 200)	

Dalton Utilities

Client Sample ID: #75 167 ZEKE ALLEN RD

HPLC

Lot-Sample #....: D9I040249-012 Work Order #....: LKDJ91AA Matrix.....: WATER
 Date Sampled....: 09/03/09 16:31 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 22:14
 Dilution Factor: 1 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFHxS)	ND	0.030	ug/L	0.0084

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
		(50 - 200)
13C4 PFOA	131	(50 - 200)
13C4 PFOS	70	(50 - 200)
13C4 PFBA	96	(50 - 200)
13C2 PFHxA	117	(50 - 200)
18O2 PFHxS	104	(50 - 200)
13C5 PFNA	88	(50 - 200)
13C2 PFDA	62	(50 - 200)
13C2 PFUnA	56	(50 - 200)
13C2 PFDoA	61	(50 - 200)

Dalton Utilities

Client Sample ID: #75 167 ZEKE ALLEN RD

HPLC

Lot-Sample #....: D9I040249-012 Work Order #....: LKDJ91AC Matrix.....: WATER
Date Sampled...: 09/03/09 16:31 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 16:16
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
MeFOSA	51	(50 - 200)	

Dalton Utilities

Client Sample ID: #75 167 ZEKE ALLEN RD

HPLC

Lot-Sample #....: D9I040249-012 Work Order #....: LKDJ92AA Matrix.....: WATER
 Date Sampled....: 09/03/09 16:31 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 16:47
 Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0069
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.015
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFHxS)	ND	0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
13C4 PFOA	111	(50 - 200)
13C4 PFOS	63	(50 - 200)
13C4 PFBA	74	(50 - 200)
13C2 PFHxA	84	(50 - 200)
18O2 PFHxS	95	(50 - 200)
13C5 PFNA	72	(50 - 200)
13C2 PFDA	66	(50 - 200)
13C2 PFUnA	58	(50 - 200)
13C2 PFDoA	55	(50 - 200)

Dalton Utilities

Client Sample ID: DUP

HPLC

Lot-Sample #....: D9I040249-013 Work Order #....: LKDKA1AA Matrix.....: WATER
 Date Sampled....: 09/02/09 Date Received...: 09/04/09
 Prep Date.....: 09/09/09 Analysis Date...: 09/09/09
 Prep Batch #....: 9252175 Analysis Time...: 21:56
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUnA)	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDoA)	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFTriA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBs)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFHxs)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	96	(50 - 200)
13C4 PFOS	61	(50 - 200)
13C4 PFBA	88	(50 - 200)
13C2 PFHxA	99	(50 - 200)
18O2 PFHxs	86	(50 - 200)
13C5 PFNA	77	(50 - 200)
13C2 PFDA	53	(50 - 200)
13C2 PFUnA	58	(50 - 200)
13C2 PFDoA	48 *	(50 - 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: DUP

HPLC

Lot-Sample #....: D9I040249-013 Work Order #....: LKDKALAC Matrix.....: WATER
Date Sampled....: 09/02/09 Date Received...: 09/04/09
Prep Date.....: 09/09/09 Analysis Date...: 09/10/09
Prep Batch #....: 9252176 Analysis Time...: 02:46
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT	RECOVERY		
MeFOSA	RECOVERY	LIMITS		
	48 *	(50 - 200)		

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: DUP

HPLC

Lot-Sample #....: D9I040249-013 Work Order #....: LKDKA2AA Matrix.....: WATER
 Date Sampled...: 09/02/09 Date Received...: 09/04/09
 Prep Date.....: 09/14/09 Analysis Date...: 09/17/09
 Prep Batch #....: 9257502 Analysis Time...: 15:26
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0098
Perfluoroctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xsS)	ND	0.030	ug/L	0.0070

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	108	(50 - 200)
13C4 PFOS	64	(50 - 200)
13C4 PFBA	76	(50 - 200)
13C2 PFHxA	87	(50 - 200)
18O2 PFHxS	95	(50 - 200)
13C5 PFNA	73	(50 - 200)
13C2 PFDA	62	(50 - 200)
13C2 PFUnA	63	(50 - 200)
13C2 PFDoA	58	(50 - 200)

Dalton Utilities

Client Sample ID: DUP#2

HPLC

Lot-Sample #....: D9I040249-014 Work Order #....: LKDKD1AA Matrix.....: WATER
 Date Sampled....: 09/03/09 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 22:30
 Dilution Factor: 1
 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0084

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
13C4 PFOA	128	(50 - 200)
13C4 PFOS	70	(50 - 200)
13C4 PFBA	98	(50 - 200)
13C2 PFHxA	123	(50 - 200)
18O2 PFHxS	100	(50 - 200)
13C5 PFNA	89	(50 - 200)
13C2 PFDA	65	(50 - 200)
13C2 PFUnA	56	(50 - 200)
13C2 PFDoA	68	(50 - 200)

Dalton Utilities

Client Sample ID: DUP#2

HPLC

Lot-Sample #....: D9I040249-014 Work Order #....: LKDKD1AC Matrix.....: WATER
Date Sampled...: 09/03/09 Date Received..: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time..: 16:23
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluoroctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
MeFOSA	39 *	(50 - 200)

NOTE (S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: DUP#2

HPLC

Lot-Sample #....: D9I040249-014
 Date Sampled....: 09/03/09
 Prep Date.....: 09/15/09
 Prep Batch #....: 9258499
 Dilution Factor: 1

Work Order #....: LKDKD2AA
 Date Received..: 09/04/09
 Analysis Date...: 09/17/09
 Analysis Time..: 17:03

Matrix.....: WATER

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0070

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
13C4 PFOA	98	(50 - 200)
13C4 PFOS	58	(50 - 200)
13C4 PFBA	70	(50 - 200)
13C2 PFHxA	81	(50 - 200)
18O2 PFHxS	87	(50 - 200)
13C5 PFNA	63	(50 - 200)
13C2 PFDA	53	(50 - 200)
13C2 PFUnA	56	(50 - 200)
13C2 PFDoA	49 *	(50 - 200)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Dalton Utilities

Client Sample ID: DUP#2

HPLC

Lot-Sample #....: D9I040249-014 Work Order #....: LKDKD2AC Matrix.....: WATER
Date Sampled....: 09/03/09 Date Received...: 09/04/09
Prep Date.....: 09/16/09 Analysis Date...: 09/19/09
Prep Batch #....: 9259175 Analysis Time...: 19:06
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT	RECOVERY		
MeFOSA	RECOVERY	LIMITS		
	53	(50 - 200)		

Dalton Utilities

Client Sample ID: TRIP BLK

HPLC

Lot-Sample #....: D9I040249-015 Work Order #....: LKDKH1AA Matrix.....: WATER
 Date Sampled....: 09/03/09 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 22:46
 Dilution Factor: 1 Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
)				
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn	ND	0.020	ug/L	0.0025
A)				
Perfluorododecanoic acid (PFDo	ND	0.020	ug/L	0.0040
A)				
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFB S)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xs)	ND	0.030	ug/L	0.0084

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
13C4 PFOA	139	(50 - 200)	
13C4 PFOS	90	(50 - 200)	
13C4 PFBA	78	(50 - 200)	
13C2 PFHxA	118	(50 - 200)	
18O2 PFHxS	108	(50 - 200)	
13C5 PFNA	113	(50 - 200)	
13C2 PFDA	88	(50 - 200)	
13C2 PFUnA	69	(50 - 200)	
13C2 PFDoA	71	(50 - 200)	

Dalton Utilities

Client Sample ID: TRIP BLK

HPLC

Lot-Sample #....: D9I040249-015 Work Order #....: LKDKH1AC Matrix.....: WATER
Date Sampled...: 09/03/09 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 16:30
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
MeFOSA	55	(50 - 200)	

Dalton Utilities

Client Sample ID: TRIP BLK

HPLC

Lot-Sample #....: D9I040249-015 Work Order #....: LKDKH2AA Matrix.....: WATER
 Date Sampled....: 09/03/09 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date...: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 17:19
 Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluorooctanoic Acid	ND		0.020	ug/L	0.0098
Perfluorooctanesulfonate	ND		0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND		0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND		0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND		0.020	ug/L	0.0029
Perfluorohexanoic acid (PFHpA)	ND		0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND		0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND		0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND		0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND		0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND		0.020	ug/L	0.018
Perfluorotetradecanoic acid (PFTeA)	ND		0.020	ug/L	0.015
Perfluorobutane sulfonate (PFB S)	ND		0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xS)	ND		0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C4 PFOA	113	(50 - 200)
13C4 PFOS	85	(50 - 200)
13C4 PFBA	78	(50 - 200)
13C2 PFHxA	85	(50 - 200)
18O2 PFHxS	96	(50 - 200)
13C5 PFNA	88	(50 - 200)
13C2 PFDA	83	(50 - 200)
13C2 PFUnA	70	(50 - 200)
13C2 PFDoA	56	(50 - 200)

Dalton Utilities

Client Sample ID: FIELD BLK

HPLC

Lot-Sample #....: D9I040249-016 Work Order #....: LKDKK1AA Matrix.....: WATER
 Date Sampled...: 09/03/09 Date Received...: 09/04/09
 Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
 Prep Batch #....: 9253507 Analysis Time...: 23:02
 Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctanoic Acid	ND	0.020	ug/L	0.0055
Perfluorooctanesulfonate	ND	0.020	ug/L	0.0068
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0062
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.0082
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0030
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.0054
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.0065
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0026
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0025
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.0040
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.0072
Perfluorotetradecanoic acid (PFTeA)	ND	0.020	ug/L	0.0087
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0045
Perfluorohexane sulfonate (PFH xS)	ND	0.030	ug/L	0.0084

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C4 PFOA	136	(50	- 200)
13C4 PFOS	81	(50	- 200)
13C4 PFBA	94	(50	- 200)
13C2 PFHxA	115	(50	- 200)
18O2 PFHxS	99	(50	- 200)
13C5 PFNA	104	(50	- 200)
13C2 PFDA	86	(50	- 200)
13C2 PFUnA	65	(50	- 200)
13C2 PFDoA	53	(50	- 200)

Dalton Utilities

Client Sample ID: FIELD BLK

HPLC

Lot-Sample #....: D9I040249-016 Work Order #....: LKDKK1AC Matrix.....: WATER
Date Sampled...: 09/03/09 Date Received...: 09/04/09
Prep Date.....: 09/10/09 Analysis Date...: 09/11/09
Prep Batch #....: 9253504 Analysis Time...: 16:38
Dilution Factor: 1

Method.....: DEN -LC-0012

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Perfluorooctane sulfonamide (F OSA)	ND	0.050	ug/L	0.0057
SURROGATE	PERCENT	RECOVERY	LIMITS	
MeFOSA	RECOVERY	(50 - 200)		

Dalton Utilities

Client Sample ID: FIELD BLK

HPLC

Lot-Sample #....: D9I040249-016 Work Order #....: LKDKK2AA Matrix.....: WATER
 Date Sampled....: 09/03/09 Date Received...: 09/04/09
 Prep Date.....: 09/15/09 Analysis Date..: 09/17/09
 Prep Batch #....: 9258499 Analysis Time...: 17:35
 Dilution Factor: 1

Method.....: DEN -LC-0012

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Perfluoroctanoic Acid	ND	0.020	ug/L	0.0098
Perfluoroctanesulfonate	ND	0.020	ug/L	0.013
Perfluorobutanoic acid (PFBA)	ND	0.020	ug/L	0.0098
Perfluoropentanoic acid (PFPA)	ND	0.030	ug/L	0.011
Perfluorohexanoic acid (PFHxA)	ND	0.020	ug/L	0.0029
Perfluoroheptanoic acid (PFHpA)	ND	0.020	ug/L	0.013
Perfluorononanoic acid (PFNA)	ND	0.020	ug/L	0.017
Perfluorodecanoic acid (PFDA)	ND	0.020	ug/L	0.0078
Perfluoroundecanoic acid (PFUn A)	ND	0.020	ug/L	0.0069
Perfluorododecanoic acid (PFDo A)	ND	0.020	ug/L	0.015
Perfluorotridecanoic acid (PFT riA)	ND	0.020	ug/L	0.018
Perfluorotetradecanoic acid (P FTeA)	ND	0.020	ug/L	0.015
Perfluorobutane sulfonate (PFBS)	ND	0.020	ug/L	0.0082
Perfluorohexane sulfonate (PFH xS)	ND	0.030	ug/L	0.0070

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C4 PFOA	106	(50 - 200)
13C4 PFOS	78	(50 - 200)
13C4 PFBA	74	(50 - 200)
13C2 PFHxA	80	(50 - 200)
18O2 PFHxS	95	(50 - 200)
13C5 PFNA	77	(50 - 200)
13C2 PFDA	80	(50 - 200)
13C2 PFUnA	75	(50 - 200)
13C2 PFDoA	63	(50 - 200)

QC DATA ASSOCIATION SUMMARY

D9I040249

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
004	WATER	DEN -LC-0012		9252175	
	WATER	DEN -LC-0012		9252176	
005	WATER	DEN -LC-0012		9252175	
	WATER	DEN -LC-0012		9252176	
	WATER	DEN -LC-0012		9259175	
006	WATER	DEN -LC-0012		9252175	
	WATER	DEN -LC-0012		9252176	
	WATER	DEN -LC-0012		9259175	
007	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
008	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
009	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
010	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
011	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
	WATER	DEN -LC-0012		9259175	
012	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	
013	WATER	DEN -LC-0012		9252175	
	WATER	DEN -LC-0012		9252176	
	WATER	DEN -LC-0012		9257502	
014	WATER	DEN -LC-0012		9253504	
	WATER	DEN -LC-0012		9253507	
	WATER	DEN -LC-0012		9258499	

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